

Docket No. 5007756-85  
Serial No. 10/676,348  
Customer No. 021129

Patent

**Amendments to the Drawings:**

Attachment: Formal Drawings

**REMARKS/ARGUMENTS**

In the Office Action mailed June 30, 2004, claims 1-12 were rejected. Claims 1-12 are pending in the application of which claims 1, 6, and 11 are independent. Applicant notes that while claims 1-12 are pending in the application, the Office Action Summary page only showed the status of claims 1-11. Applicant has thoroughly reviewed the outstanding Office Action including the Examiner's remarks and the references cited therein. The following remarks are believed to be fully responsive to the Office Action. All the pending claims at issue are believed to be patentable over the cited references.

**CLAIM REJECTIONS – 35 U.S.C. § 112**

Claims 2, 3, and 7 stand rejected under 35 U.S.C. §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Claims 2, 3, and 7 have been amended to more clearly recite features of the ejector as recited in the independent claims from which they depend. In light of the amendments to claims 2, 3, and 7, Applicant hereby respectfully requests that the rejection be withdrawn.

**CLAIM REJECTIONS – 35 U.S.C. § 102(b)**

Claims 1-12 stand rejected under 35 U.S.C. §102(b) as being anticipated by United States Patent No. 4,595,091 to Scopatz *et al* (hereinafter referred to as "Scopatz"). Claims 6, and 11-12 stand rejected under 35 U.S.C. §102(b) as being anticipated by United States Patent No. 5,010,998 to MacMillan (hereinafter referred to as "MacMillan"). Claims 6 and 11-12 stand

rejected under 35 U.S.C. §102(b) as being anticipated by United States Patent No. 5,217,104 to Pelletier (hereinafter referred to as “Pelletier”). In light of the following remarks, Applicant respectfully submits that these claims are allowable.

Initially, Applicant notes that it is axiomatic that to qualify as an anticipation under Section 102, the cited reference must “bear within its four corners adequate directions for the practice of the patent invalidated.” (See, for example, Dewey & Almay Chemical Co. v. Mimex Co., Inc., 52 U.S.P.Q. 138 (2<sup>nd</sup> Cir. 1942)). Applicant respectfully submits that Scopatz, MacMillan, and Pelletier embody no such directions.

***The Scopatz Reference***

Claims 1-12 stand rejected under 35 U.S.C. §102(b) as being anticipated by Scopatz.

The Scopatz reference shows a diverter apparatus for rapidly and gently diverting articles, typically fruit, from a moving conveyor. The Scopatz apparatus comprises an ejector lever member, an air cylinder assembly, and a stationary ejector lever mount, the two former sharing a common pivot point while each of the two is pivotable with respect to each other while pivoting on pivot pins mounted to the stationary mount. FIGS. 2 and 3 of the Scopatz reference show an ejector lever that rotates around an axis that is parallel to the direction of conveyor roller travel. Scopatz also shows a diverter linkage with at least three mounting points where an actuator pivotably mounted to the ejector lever intermediate to the end of the ejector lever.

***Claims 1-5***

Amended claim 1 recites "[a]n ejector for use in a product determination and separation line, the line including a conveyor for transferring a product from a first location, said ejector comprising: a flipper arm; an actuator for rotating said flipper arm around an axis substantially perpendicular to the conveyor direction; and a support for locating said flipper arm and said actuator above a surface of the conveyor."

Pages 2 and 3 of the Office Action state that Scopatz shows an ejector that "comprises a flipper arm 54, an actuator 56 for rotating the flipper arm, and a support 46 which positions the flipper arm and the actuator above a surface of the conveyor . . ." Applicant respectfully submits that, even if the foregoing is true, Scopatz does not disclose or show the feature of a "an actuator for rotating said flipper arm around an **axis substantially perpendicular** to the conveyor direction" as recited by amended claim 1. As stated *supra*, the Scopatz reference discloses an ejector lever which is rotated by an air cylinder around an axis that is **parallel** to the direction of conveyer roller travel, as is clearly disclosed in FIGS 2 and 3.. However, Scopatz does not disclose or suggest rotating an ejector lever around a substantially perpendicular axis with respect to the conveyer roller direction. Thus Scopatz does not anticipate amended claim 1. Claims 2-5 depend from claim 1 and should be allowable over the Scopatz reference for at least the same reasons as claim 1.

***Claims 6-10***

Amended claim 6 recites "[a]n ejector for use in a product determination and separation line, the line including a conveyor for transferring a product from a first location, said ejector comprising: a flipper arm; an actuator for rotating said flipper arm; and a support for locating said flipper arm

above a surface of the conveyor to at least partially overlap a belt of the conveyor when said flipper arm is in a non-activated position, wherein said flipper arm is positioned below said actuator."

According to page 3 of the Office Action, Scopatz shows "a support 46 which positions the flipper arm and the actuator above a surface of the conveyor so that the flipper arm partially overlaps the conveyor when the flipper arm is in a non-activated position." Applicant respectfully disagrees that Scopatz discloses the feature of a flipper arm ejector that partially overlaps the conveyor where flipper arm ejector is in a non-active position. In fact, Scopatz discloses an apparatus where the ejector lever does not overlap, (partially or otherwise) conveyor rollers when in a non-active position. FIG. 2 of the Scopatz reference shows the relative positions of the ejector lever 54 with respect to the conveyor rollers 14. The ejector lever would clearly come into contact with the conveyor rollers and cause undesirable results if the ejector lever at least partially overlapped the conveyor rollers when the ejector lever was in a non-activated position. That the ejector lever does not partially overlap the conveyor rollers when non-activated can be further appreciated in the specification. According to Column 5, lines 9-13 "[a]t the instant the diverting mechanism D is **substantially midway between rollers**, as illustrated in FIG. 2, diverter D is actuated to remove lemon 10 from the pack line (FIG. 7B) and onto belt 26."

Amended claim 6 further recites "a support for locating said flipper arm above a surface of the conveyor to at least partially overlap a belt of the conveyor when said flipper arm is in a non-activated position, wherein said **flipper arm is positioned below said actuator**." Applicant respectfully submits that Scopatz does not disclose the aforementioned feature. Instead Scopatz discloses an ejector lever mounted to one side of a cylinder (actuator). The side

mounted/positioned arrangement is clearly shown in FIGS. 3, 7A, and 7B of the Scopatz reference where an ejector lever 54 is clearly mounted to one side of the cylinder 56. The side position is further shown by the arrangement and mounting of the ejector lever and cylinder as described in column 4, lines 6-9, "[c]ylinder 56 is typically an air cylinder having a piston rod 58 extending therefrom, which rod is secured to a bearing member 60 pivotable around pivot pin 62 mounted intermediate the ends of ejector lever 54." Therefore the Scopatz clearly shows and describes an ejector lever **mounted to one side** of a cylinder but does not disclose a flipper arm **positioned below** said actuator.

Thus, for at least the foregoing reasons, Scopatz does not anticipate amended claim 6. Claims 7-10 depend from claim 6 and are allowable over the Scopatz reference for at least the same reasons as claim 6.

### ***Claims 11-12***

Claim 11 recites "[a] method of deflecting a product from a conveyor of a product determination and separation line comprising the steps of: positioning a flipper arm above the conveyor such that said flipper arm at least partially overlaps a belt of the conveyor when said flipper arm is in a non-activated position; activating said flipper arm such that said flipper arm rotates across the surface of the conveyor belt as a product approaches; and directing the product to a desired location via said flipper arm.

As discussed *supra* with respect to amended claim 6, Scopatz does not disclose an ejector lever that at least partially overlaps the conveyor rollers when the ejector lever is in a non-activated position. Therefore since Scopatz does not disclose the feature of a flipper arm that at

least partially overlaps a belt of a conveyer of in a non-active position, Scopatz also fails to disclose or suggest the step of "positioning a flipper arm above the conveyor such that said flipper arm at least partially overlaps a belt of the conveyor when said flipper arm is in a non-activated position" as recited by claim 11.

Thus, Scopatz does not anticipate claim 11. Claim 12 depends from claim 11 and is allowable over the Scopatz reference for at least the same reason as claim 11.

### ***The MacMillan Reference***

Claims 6, and 11-12 stand rejected under 35 U.S.C. §102(b) as being anticipated by MacMillan.

The MacMillan reference shows a diverter for diverting articles traveling on a conveyor, comprising a diverter member (1) which is mounted on a linkage for movement into and out of the path of the articles and which has an elongate article contact surface to cooperate with the articles traveling on the conveyor. The linkage includes a pivotal connection (4a) with the diverter member (1) intermediate the length of the surface so that the diverter member (1) on contact with each article gives the article a sustained push to guide the article laterally of the conveying direction followed by a final nudge to complete the lateral displacement.

***Claim 6***

Amended claim 6 recites "[a]n ejector for use in a product determination and separation line, the line including a conveyor for transferring a product from a first location, said ejector comprising: a flipper arm; an actuator for rotating said flipper arm; and a support for locating said flipper arm above a surface of the conveyor to at least partially overlap a belt of the conveyor when said flipper arm is in a non-activated position, wherein said flipper arm is positioned below said actuator."

Page 3 of the Office Action states, that MacMillan shows "[t]he ejector comprises a flipper arm 10, an actuator 6 for rotating the flipper arm, and a support 2 which positions the flipper arm and the actuator above a surface of the conveyor so that the flipper arm partially overlaps the conveyor when the flipper arm is in a non-activated position." Applicant respectfully disagrees.

MacMillan fails to disclose the feature of "an actuator for rotating said flipper arm." MacMillan shows an apparatus with a complicated linkage used to move a diverter blade. This arrangement is described throughout the specification including column 1, lines 48-54, "[r]eferring to the drawing, a diverter blade 1 is mounted on a base 2 by means of two links 3 and 4. In more detail, the blade 1 carries a projecting arm 5 to which the link 3 is attached and whereas the link 4 is attached directly to the base 2, the link 3 is driveably connected to the output shaft 6 of a motor and gear reduction unit 7 which is itself secured to the base 2." The actuator is connected to a linkage and not to the diverter blade. According to column 1, lines 58-62, "[t]he link 3 of course, forms a crank and on rotation of the shaft 6 in the anti-clockwise direction, as seen in the figure, the blade 1 moves away from the position shown to the left in the drawing, this movement being initially a



general bodily movement." Thus, the linkage/crank/shaft arrangement of the MacMillan apparatus is not the claimed feature of "an actuator for rotating said flipper arm" as recited in amended claim 6.

Amended claim 6 further recites "a support for locating said flipper arm above a surface of the conveyor to at least partially overlap a belt of the conveyor when said flipper arm is in a non-activated position, wherein said **flipper arm is positioned below said actuator.**" Applicant respectfully submits that MacMillan does not disclose the aforementioned feature. FIG. 1 and the specification clearly show a diverter blade mounted above or at the same level as the actuator.

Applicant also respectfully submits that MacMillan does not disclose or suggest the feature of "a support for locating said flipper arm above a surface of the conveyor to at least partially overlap a belt of the conveyor when said flipper arm is in a non-activated position."

The operation of the apparatus is described in Column 1, lines 67 - Colum 2, line 1, 25 – "[t]his compound reciprocating and oscillatory movement is of course, the movement of a four bar chain." In summary, the position of the diverter bar when inactive is a function of the linkage and not attributable to the support. It should be noted that MacMillan specification does not mention, lest disclose or suggest locating a flipper arm ejector to at least partially overlap a belt of the conveyer as is required to anticipate a recited claim element.

Thus, for at least the foregoing reasons, MacMillan does not anticipate amended claim 6.

***Claims 11-12***

Claim 11 recites "[a] method of deflecting a product from a conveyor of a product determination and separation line comprising the steps of: positioning a flipper arm above the conveyor such that said flipper arm at least partially overlaps a belt of the conveyor when said flipper arm is in a non-activated position; activating said flipper arm such that said flipper arm rotates across the surface of the conveyor belt as a product approaches; and directing the product to a desired location via said flipper arm.

As discussed *supra* with respect to claim 6, MacMillan does not disclose a flipper arm that at least partially overlaps a belt of the conveyor when the flipper arm is in a non-activated position. Therefore MacMillan does not disclose or suggest the step of "positioning a flipper arm above the conveyor such that said flipper arm at least partially overlaps a belt of the conveyor when said flipper arm is in a non-activated position" as recited by claim 11.

Thus, MacMillan does not anticipate claim 11. Claim 12 depends from claim 11 and is allowable over the MacMillan reference for at least the same reason as claim 11.

***The Pelletier Reference***

Claims 6 and 11-12 stand rejected under 35 U.S.C. §102(b) as being anticipated by Pelletier.

The Pelletier reference shows a device for deviating objects moving on a conveyor (13) in a direction (F) has a deflecting arm (1) passing from an inactive position to an active position in which it is transverse to the conveyor (13) by a combined movement during which it moves in the same direction (F) as the conveyor (13) while pivoting on itself. The device has two arms (1, 2) articulated

one on the other--a first, deflecting (1), articulated at the end (8) of a second, carrying arm (2). The second arm (2) is directed in an opposite sense to the displacement (F) of the conveyor (13), being carried by a vertical drive shaft (12), situated on the side of the conveyor (13), this shaft driving it in rotation either in one direction or in the other. The end (1a) of the first arm (1) is guided in a track (3, 4) forcing it to move along the conveyor (13).

***Claim 6***

Amended claim 6 recites "[a]n ejector for use in a product determination and separation line, the line including a conveyor for transferring a product from a first location, said ejector comprising: a flipper arm; an actuator for rotating said flipper arm; and a support for locating said flipper arm above a surface of the conveyor to at least partially overlap a belt of the conveyor when said flipper arm is in a non-activated position, wherein said flipper arm is positioned below said actuator."

Applicant respectfully submits that the intricate linkage of the Pelletier reference coupled to a deflecting arm that is pivotably mounted on a second carrying arm does not disclose the feature of "an actuator for rotating said flipper arm" as recited in claim 6. According to page 4 of the Office Action, Pelletier discloses "a flipper arm 1." According to the specification item 1 is described as a deflecting arm. Pelletier does not disclose any apparatus embodiment with the deflecting arm connected to an actuator. Therefore Pelletier does not disclose the feature of an actuator for rotating a flipper arm.

Amended claim 6 further recites "a support for locating said flipper arm above a surface of the conveyor to at least partially overlap a belt of the conveyor when said flipper arm is in a non-activated position, wherein said **flipper arm is positioned below said actuator.**" Applicant

respectfully submits that Pelletier does not disclose the aforementioned feature. FIGS. 1-8 clearly shows both the deflecting and carrying arm mounted at the **same level** or **above** the actuator. Thus, Pelletier does not disclose a flipper arm positioned below an actuator.

For at least the foregoing reasons, Pelletier does not anticipate amended claim 6.

***Claims 11-12***

Claim 11 recites "[a] method of deflecting a product from a conveyor of a product determination and separation line comprising the steps of: positioning a flipper arm above the conveyor such that said flipper arm at least partially overlaps a belt of the conveyor when said flipper arm is in a non-activated position; activating said flipper arm such that said flipper arm rotates across the surface of the conveyor belt as a product approaches; and directing the product to a desired location via said flipper arm.

Applicant respectfully submits that Pelletier does not disclose performing the step of "activating said flipper arm such that said flipper arm rotates across the surface of the conveyor belt as a product approaches." According to column 4, lines 15-23, neither of the arms actually rotate across the surface of a conveyor **as a product approaches**.

Pelletier also does not disclose the step of "positioning a flipper arm above the conveyor such that said flipper arm at least partially overlaps a belt of the conveyor when said flipper arm is in a non-activated position." Pelletier discloses maintaining both of the arms in a position that is practically parallel to the conveyor when inactive. Pelletier describes the arrangement of the arms as "two arms 1 and 2 articulated to each other on the vertical axis 8" and given at

arrangement, according to column 3, lines 16-22 "[a]rm 2 can thus occupy two positions-an **inactive position**, in which it is **practically parallel to conveyor 13** being directed in a direction opposite the direction of movement F thereof (FIGS. 1, 2, 5) and an active position (FIG. 6) in which it is transverse to conveyor 13 forming with it an acute angle of less than 90.degree. (of the order of 60.degree. in the example shown)." Arm 1 is hinged to arm 2, and is also positioned in a manner that is practically parallel to the conveyor when inactive. Therefore, Pelletier fails to show the step of "positioning a flipper arm above the conveyor such that said flipper arm at least partially overlaps a belt of the conveyor when said flipper arm is in a non-activated position."

Thus, Pelletier does not anticipate claim 11. Claim 12 depends from claim 11 and is allowable over the Pelletier reference for at least the same reason as claim 11.

#### **CLAIM REJECTIONS – 35 U.S.C. § 103(a)**

Claims 1-12 stand rejected under 35 U.S.C. §103(a) as being obvious in view of United States Patent No. 4,595,091 to Scopatz *et al* (hereinafter referred to as "Scopatz").

The Examiner bears the initial burden of factually supporting any prima facie conclusion of obviousness. *MPEP* §2142. To establish a prima facie case of obviousness, three criteria must be met. First, there must be some suggestion or motivation, to modify the references or to combine reference teachings. Second, there must be reasonable expectation of success. Finally, the prior art must teach all the claim limitations. *MPEP* §2142. In light of the argument regarding the Scopatz reference, the reference does not teach or suggest all the claim limitations of the present application.

Applicant respectfully points to the final prong of the test, which states the prior art must teach all the claim limitations.

***The Scopatz Reference***

At the very least, the Scopatz reference does not teach all of the limitations of independent claims 1, 6, and 11 because of the arguments set forth *supra* regarding the Scopatz reference in the anticipation section of this response.


In light of the foregoing argument, Applicant respectfully requests withdrawal of the standing rejection to Claims 1, 6, and 11 as being anticipated by or, in the alternative, as obvious over Scopatz. Claims 2-5, 7-10, and 12 depend from independent claims 1, 6, and 11 respectively, and are allowable for at least the same reasons as claims 1, 6, and 11. Thus, withdrawal of the standing rejection to claims 1-12 as being anticipated by, or obvious over Scopatz is respectfully requested.

Applicant respectfully requests that a timely Notice of Allowance be issued in this case.  
In view of the foregoing arguments, Applicant respectfully requests withdrawal of fee standing objection to claims 1-12.

If there are any matters which can be clarified by telephone, the Examiner is requested to contact the undersigned attorney.

If there are any fees due in connection with the filing of this response, the Office is authorized to charge same to Deposit Account No. 50-0354.

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Attachments